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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|------------------------|---------------------|------------------|
| 10/823,870 | 04/14/2004 | John Philip MacCormick | MSFT-5036/307730.01 | 6179 |

41505 7590 11/21/2007
WOODCOCK WASHBURN LLP (MICROSOFT CORPORATION)
CIRA CENTRE, 12TH FLOOR
2929 ARCH STREET
PHILADELPHIA, PA 19104-2891

EXAMINER

MYINT, DENNIS Y

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2162

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|-----------|---------------|
| MAIL DATE | DELIVERY MODE |
|-----------|---------------|

11/21/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Interview Summary

Application No.

10/823,870

Applicant(s)

MACCORMICK, JOHN
PHILIP

Examiner

Dennis Myint

Art Unit

2162

All participants (applicant, applicant's representative, PTO personnel):

(1) Dennis Myint (Examiner).

(3) Mr. Kenneth Eiferman (Applicant's Representative).

(2) Cam Y. Truong (Primary Examiner).

(4) _____.

Date of Interview: 14 November 2007.

Type: a) ☒ Telephonic b) ☐ Video Conference
c) ☐ Personal [copy given to: 1) ☐ applicant 2) ☐ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☒ No.

If Yes, brief description: _____.

Claim(s) discussed: 1 and 17.

Identification of prior art discussed: Reiter, Bumbulis, and Burnett.

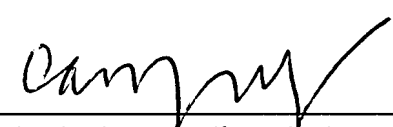
Agreement with respect to the claims f) ☐ was reached. g) ☒ was not reached. h) ☐ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: See Continuation Sheet.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)


THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.


Examiner's signature, if required

Continuation of Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments:

On November 14, 2007, Applicant's Representative, Mr. Kenneth R. Eiferman, initiated a telephonic interview. Applicant's Representative presented proposed amendments to claims 1 and claim 17. Applicant's Representative explained in details how the proposed amendments would differentiate from the prior art. Examiner replied that said amendments overcome the current prior art. Examiner also stated that Examiner reserves the right to thoroughly review the current prior art and update the search as necessary with respect to the amendments.



Dennis Myint
Examiner
AU-2162.



INTELLECTUAL PROPERTY LAW
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FACSIMILE

DATE: **October 26, 2007**
OFFICIAL PAPER

JOB CODE:

Please deliver this and the following pages to:

Examiner: **D Myint**
U.S.P.T.O. Group Art Unit: **2162**
Telecopier No.: **571-273-5629**
U.S. Serial No.: **10/823,870**
Client/Matter No.: **MSFT-5036**
Sender's Name: **Kenneth R Eiferman**
Pages to Follow: **3**

If transmission is not complete, please call our Philadelphia Office at (215) 568-3100.

COVER MESSAGE:

OFFICIAL FACSIMILE. PLEASE DELIVER TO EXAMINER IMMEDIATELY.

Attached hereto is/are the following documents:

1) 10/823,870 Interview Agenda - Please call 215-564-8958 to schedule telephone interview

THIS MESSAGE IS INTENDED ONLY FOR THE USE OF THE INDIVIDUAL OR ENTITY TO WHICH IT IS ADDRESSED AND MAY CONTAIN INFORMATION THAT IS PRIVILEGED, CONFIDENTIAL AND EXEMPT FROM DISCLOSURE UNDER APPLICABLE LAW. IF THE READER OF THIS MESSAGE IS NOT THE INTENDED RECIPIENT, OR THE EMPLOYEE OR AGENT RESPONSIBLE FOR DELIVERY OF THE MESSAGE TO THE INTENDED RECIPIENT, YOU ARE HEREBY NOTIFIED THAT ANY DISSEMINATION, DISTRIBUTION OR COPYING OF THIS COMMUNICATION IS STRICTLY PROHIBITED. IF YOU HAVE RECEIVED THIS COMMUNICATION IN ERROR, PLEASE NOTIFY US IMMEDIATELY BY TELEPHONE AND RETURN THE ORIGINAL TO US AT THE ABOVE ADDRESS VIA THE U.S. POSTAL SERVICE. THANK YOU.

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APPLICANT INITIATED INTERVIEW REQUEST FORM

Application No.: 10/823,870

First Named Applicant: John Philip MacCormick

Examiner: Myint, D

Art Unit: 2162

Status of Application: final Office Action dated 8/20/2007

Tentative Participants:

(1) Kenneth R. Eiferman (2) _____

(3) _____ (4) _____

Proposed Date of Interview: October 10

Proposed Time: 2:00

Type of Interview Requested:

(1) ☒ Telephonic (2) ☐ Personal (3) ☐ Video Conference

Exhibit To Be Shown or Demonstrated: ☐ YES ☒ NO

If yes, provide brief description: _____

ISSUES TO BE DISCUSSED

| Issued (Rej., Obj., etc.) | Claims/Fig. #s | Prior Art | Discussed | Agreed | Not Agreed |
|------------------------------|--------------------|-----------|-----------|--------|---------------|
| (1) Rejection | Independent claims | | | | |
| (2) | | | | | |
| (3) | | | | | |
| (4) | | | | | |

☒ Continuation Sheet Attached

Brief Description of Arguments to be Presented: See attached sheet

An interview was conducted on the above-identified application on _____.

NOTE: This form should be completed by applicant and submitted to the examiner in advance of the interview (see MPEP 713.01). This application will not be delayed from issue because of applicant's failure to submit a written record of this interview. Therefore, applicant is advised to file a statement of the substance of this interview (37 CFR 1.133(b)) as soon as possible.

Applicant/Applicant's Representative Signature

Examiner/SPE Signature

Kenneth R. Eiferman

Typed/Printed Name of Applicant or Representative

51,647

Registration Number, if applicable

Applicants propose the following amendments:

1. (Currently Amended) A method of ~~changing values of~~ renaming a range of consecutive keys in an original B-tree having a plurality of keys stored therein, comprising:
 - excising the range of consecutive keys from the original B-tree, the original B-tree representing a file system, wherein renaming an element of the file system requires the changing of the values of the range of consecutive keys, the excision of the range of consecutive keys converting the original B-tree into a trimmed tree;
 - balancing the trimmed tree;
 - storing the range of consecutive keys excised from the B-tree to form an extracted tree;
 - ~~changing the values of~~ renaming the keys of the extracted tree to form a modified extracted tree;
 - inserting the modified extracted tree into the balanced trimmed tree to form a final B-tree;
 - and
 - balancing the final B-tree,
 - wherein the original B-tree represents a hierarchical namespace of a file system of a computing device, and the range of consecutive keys belong to a directory of the file system such that the directory is represented as the B-tree, and wherein the changing of the values of the range of consecutive keys is in connection with the directory being renamed, ~~and~~
 - wherein each key in the original B-tree contains a pathname for a file or directory of the file system prior to the renaming of the directory,
 - wherein the excised range of consecutive keys satisfy a range query "Y/" < v < "Y/∞"
 - wherein "Y" represents the element of the file system to be renamed, "v" represents keys in the B-tree, and "∞" represents a special character defined to be greater than all characters in a set of alphanumeric symbols used for creating the plurality of keys, and
 - wherein the excising further comprises finding a root node of the extracted tree by traversing the original B-tree and stopping at a node in the original B-tree that has one or more keys that satisfy the range query, moving down from the node along two separate paths including a first path that follows "Y/" and a second path that follows "Y/∞", and continuing until reaching a leaf node along each of the two paths.

17. (Previously Presented) A method of modifying a B-tree, wherein the B-tree represents a file system of a computing device, wherein renaming an element of the file system requires the changing of the values of the range of consecutive keys, each key in the B-tree contains a pathname for a file or directory of the file system, the method comprising:

excising keys of a directory of the file system being renamed from the B-tree, the directory being represented as the B-tree, the excision of the keys of the directory converting the B-tree into a trimmed tree;

balancing the trimmed tree;

storing the keys of the directory excised from the B-tree in an extracted tree;

changing the values of the keys of the extracted tree to reflect a new name of the directory;

inserting the extracted tree with changed values of the keys into the balanced trimmed tree to form a final B-tree; and

balancing the final B-tree,

wherein the excised keys of the directory satisfy a range query " $Y/ \leq v < Y/\infty$ ", wherein " Y " represents the element of the file system to be renamed, " v " represents the keys in the B-tree, and " ∞ " represents a special character defined to be greater than all characters in a set of alphanumeric symbols used for creating the plurality of keys, and

wherein the excising further comprises finding a root node of the extracted tree by traversing the original B-tree and stopping at a node in the original B-tree that has one or more keys that satisfy the range query, moving down from the node along two separate paths including a first path that follows " $Y/$ " and a second path that follows " Y/∞ ", and continuing until reaching a leaf node along each of the two paths.